

CLAIMS

1. Process for managing priorities of access of applications to resources of devices linked by a communication network, the process comprising the 5 steps:

- of allocating, to each application, a level of priority of access to the resources of the network, the said levels comprising at least the following levels:

10 (a) a first access priority level for an application which is not under the direct control of a user,

(b) a second access priority level for an application which can be commanded directly by a user,

15 - of authorizing preemption by a first application of access to a resource, which access was obtained previously by a second application, as a function of the respective access priorities of the first and second applications.

20 2. Process according to Claim 1, wherein a resource simultaneously allows accesses by at least N applications, N being greater than or equal to 1.

25 3. Process according to Claim 1, wherein the preemption step is preceded by a negotiation phase during which the first application transmits a message to the second application asking it to agree to or to refuse to abandon the access in favor of the first application.

30 4. Process according to Claim 3, wherein a phase of preemption of an application having the second priority level by an application having the first priority level is always preceded by a negotiation phase.

35 5. Process according to Claim 3, wherein a phase of preemption of an application having the second priority level by an application having the second priority level is always preceded by a negotiation phase.

6. Process according to Claim 3, wherein there are provided at least three priority levels, the third priority level being higher than the second priority level, the latter being higher than the first priority
5 level, there is a negotiation phase if the priority level of the first application is identical to or lower than the priority level of the second application.

7. Process according to Claim 3, wherein there is preemption directly without negotiation if the
10 security level of the first application is higher than the security level of the second application.

8. Process according to Claim 2, wherein an application making an attempt to reserve access for a resource already reserved by N client applications is
15 placed in a queue, standing by for the freeing of the resource by one of the N client applications.

9. Process according to Claim 8, wherein an application is placed on standby in a queue only if this is specified by this application in its access
20 request.

10. Process according to Claim 1 furthermore including the steps:

- of allocating a primary level of rights of access, for a given resource, to an application having
25 requested access to this resource first,

- of allocating a secondary level of rights of access to other applications reserving the said resource, the rights of access of the secondary level being such that they do not interfere with the rights
30 of access of the primary level.

11. Process according to Claim 10, wherein, following a command transmitted by an application having a secondary level right of access to a resource, the resource itself determines whether this command does or does not interfere with the access rights of
35 the primary level.

12. Process according to Claim 10, wherein a resource agrees to any command received from the application having a primary level right of access to

this resource, even if the execution of the command interferes with the commands previously received from an application having a secondary level of right of access.

- 5 13. Process according to Claim 10, wherein preemption and, as appropriate negotiation, is authorized only so as to force abandonment of an access held by an application having a primary access level.